

CLAIMS

WHAT IS CLAIMED IS:

1. An electronic camera comprising:

an image pickup part for capturing an image of light passing through a

5 photo-taking lens to generate color image data;

an ambient light colorimetric part for measuring color of ambient light without passing through said photo-taking lens;

an operation member for receiving an instruction for a colorimetric timing of said ambient light from a user;

10 a colorimetric calculation part for obtaining a colorimetric result from said ambient light colorimetric part in synchronization with said colorimetric timing, and for calculating and storing color gain, said color gain bringing said colorimetric result near to achromatic color; and

a white balance adjustment part for carrying out white balance adjustment of said image data with the use of said color gain stored in said colorimetric calculation part.

2. The electronic camera according to claim 1, wherein

said colorimetric calculation part holds a difference in spectral characteristics between said image pickup part and said ambient light colorimetric part as correction data, to correct an error occurring in said white balance adjustment in accordance with said correction data.

3. The electronic camera according to claim 1, wherein

said colorimetric calculation part prestores respective correspondence relations between "a colorimetric result of ambient light" and "an applicability of white balance adjustment carried out based on the colorimetric result", and

25 when said colorimetric result from said ambient light colorimetric part turns out to

be inadequate by referring to said correspondence relations, said colorimetric calculation part carries out "an abort of said white balance adjustment based on said ambient light" and/or gives "a warning which indicates that said ambient light is inadequate to said white balance adjustment".

- 5 4. The electronic camera according to claim 1, further comprising
a TTL photometric part for measuring luminance of light incident on said image pickup part, and wherein

said colorimetric calculation part compares luminance of said ambient light received by said ambient light colorimetric part with the luminance of said light incident on
10 said image pickup part, and

when a difference in said luminance is equal to or more than a predetermined threshold value, said colorimetric calculation part carries out "an abort of white balance adjustment based on ambient light" and/or gives "a warning which indicates that ambient light is inadequate to white balance adjustment".

- 15 5. The electronic camera according to claim 1, further comprising
a TTL colorimetric part for measuring color of light incident on said image pickup part, and wherein

said colorimetric calculation part compares the colorimetric result of said ambient light received by said ambient light colorimetric part with a colorimetric result of said light
20 incident on said image pickup part, and

when a difference in said colorimetric results is equal to or more than a predetermined threshold value, said colorimetric calculation part carries out "an abort of white balance adjustment based on ambient light" and/or gives "a warning which indicates that ambient light is inadequate to white balance adjustment".

- 25 6. The electronic camera according to claim 1, wherein

said colorimetric calculation part obtains a plurality of colorimetric results of said ambient light from said ambient light colorimetric part to calculate an average value of said plurality of colorimetric results, and obtains color gain for white balance adjustment based on said average value of the colorimetric results.